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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/697,451

10/30/2003

Yasuo Sato

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EXAMINER

LIU, ERIC

ART UNIT

PAPER NUMBER

3628

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



**Office Action Summary**

Application No.

10/697,451

Applicant(s)

SATO ET AL.

Examiner

Eric Liou

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/30/03 and 10/20/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.



## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 9 is objected to because of the following informality: spelling error. The term “fist” in line 4 should be replaced with “first”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. As per claim 14, the preamble recites “a computer program..”, however, does not recite that the computer program is encoded or recorded on a physical medium readable by a computer. Thus, the claim is directed to functionally descriptive material that is not functionally or structurally interrelated to the medium. Data structures not claimed as embodied in computer readable media are descriptive material per se and are not statutory because they are neither physical “things” nor statutory processes. Such claimed data structures do not define any structural and functional interrelationships between the data structure. See MPEP 2106(IV)(B)(1)(a).

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:



The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The claims 1-15 are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

8. As per claim 1, the limitation "...determining a stochastic distribution of uncertain factors included in an expected balance which is resulted from said electric power generating plan and said electric power trading plan, and presenting said stochastic distribution of uncertain factors in a time-series form." is indefinite. The importance of the electric power generating plan and electric power trading plan is unclear since they are not positively recited and provided in a step in the claim.

9. As per claim 6, the limitation "...generator power output, interruption term of power supply regarding to maintenance inspection, a term of output restriction and contracted electric power for the other axis..." is indefinite. It is unclear how all of the quantities can reside on the same axis at one time. The Examiner interprets the claim to be the computer implemented method of claim 2, wherein said electric power generating plan and the electric power trading plan and said stochastic distribution are presented in a first chart that gives a time axis for an axis and a generator power output, interruption term of power supply regarding to maintenance inspection, a term of output restriction, or a contracted electric power on the other axis and a



Art Unit: 3628

second chart that gives a time axis for an axis and expected value and variance of said stochastic distribution for another axis.

10. As per claim 13, the preamble of the claim recites computer equipment comprising of devices. However, there are no devices recited in the body of the claim.

11. As per claim 14, the preamble of the claim recites a computer program comprising of program modules. However, there are no program modules recited in the body of the claim.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1, 2, 4-5, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Takriti, U.S. Patent No. 6,021,402.

14. As per claim 1, Takriti teaches in a planning system that makes plans of electric power generation and electric power trade, a computer implemented method for an electric power generating plan and an electrical power trading plan comprising the steps of: determining a stochastic distribution of uncertain factors included in an expected balance which is resulted from said electric power generating plan and said electric power trading plan (Takriti: column 4, lines 58-67 and column 5, lines 1-19), and presenting said stochastic distribution of uncertain factors in a time-series form (Takriti: Figures 9A, 9B, and 11).



Art Unit: 3628

15. As per claim 2, Takriti teaches the method of claim 1 as described above. Takriti further teaches the said electric power generating plan and said electric power trading plan are presented in time-series forms (Takriti: Figures 9A, 9B, and 11).

16. As per claim 4, Takriti teaches the method of claim 1 as described above. Takriti further teaches the said uncertainty factors are variances of unit price of fuel to be used for power generators (Takriti: Figure 2, "112" and Figure 3, see fuel price per MMBTU).

17. As per claim 5, Takriti teaches the method of claim 1 as described above. Takriti further teaches the said uncertainty factors are variances of unit price of electric power to be traded (Takriti: Figure 3, see price per MWH for forecasted trades).

18. As per claim 13, Takriti teaches in a planning computer equipment that makes electric power generating plans and electric power trading plans, said computer equipment comprising the devices of: determining a stochastic distribution due to uncertain factors regarding to a balance caused by electric power generation and electric power trade (Takriti: column 4, lines 50-67 and column 5, lines 1-19), and presenting said stochastic distribution in a time-series form (Takriti: Figures 9A, 9B, and 11).

19. As per claim 14, Takriti teaches In a computer program that has a function for planning computer equipment that makes electric power generating plan and electric power trading plan, said computer program comprising the program modules of: determining a stochastic distribution due to uncertain factors regarding to a balance caused by electric power generation and electric power trade (Takriti: column 4, lines 50-67 and column 5, lines 1-19), and presenting said stochastic distribution in a time-series form (Takriti: Figures 9A, 9B, and 11).



Art Unit: 3628

20. As per claim 15, Takriti teaches a computer readable recording medium to store and retrieve said program defined in claim 14 (Takriti: Figure 3, "Risk Management System", column 4, lines 50-67, and column 5, lines 1-19).

***Claim Rejections - 35 USC § 103***

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 3, 6-7, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takriti, U.S. Patent No. 6,021,402. in view of Iino, U.S. Patent No. 5,873,251.

23. As per claim 3, Takriti teaches the method of claim 1 as described above. Takriti further teaches the uncertainty factors are variances of electric power demand (Takriti: Figures 9A, 9B, and 11).

24. Takriti does not teach prediction errors caused by the annulment of an electric power trading plan.

25. Iino teaches prediction errors caused by annulment of electric power trading plan (Iino: Figure 10, "48" and "49" and column 14, lines 31-42, The Examiner interprets the trouble scenario database 49 to store the cases where there are prediction errors in an electric power trading plan.).

26. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Takriti to have included prediction errors



caused by the annulment of an electric power trading plan as taught by Iino for the advantage of providing a system and method that will increase the efficiency of electric power production so as to contribute to the protection of the environment (Iino: column 1, lines 40-42).

27. As per claim 6, Takriti teaches the method of claim 2 as described above. Takriti further teaches the said electric power generating plan and the electric power trading plan and said stochastic distribution are presented in a chart that gives a time axis for an axis and expected value and variance of said stochastic distribution for another axis (Takriti: Figures 9A, 9B, and 11).

28. Takriti does not teach a chart that gives a time axis for an axis and generator power output, interruption term of power supply regarding to maintenance inspection, a term of output restriction, or contracted electric power for the other axis.

29. Iino teaches a first chart that gives a time axis for an axis and generator power output on the other axis (Iino: Figures 7F and 7H).

30. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Takriti to have included a chart that gives a time axis for an axis and generator power output on the other axis as taught by Iino for the advantage of providing a system and method that will increase the efficiency of electric power production so as to contribute to the protection of the environment (Iino: column 1, lines 40-42).

31. As per claim 7, Takriti in view of Iino teaches the method of claim 6 as described above. Iino further teaches the steps of: receiving designation of an area of blocks where power generator output is presented in said first chart thereof (Iino: Figures 7F and 7H), and presenting power generation volume, and power generator start stop term, in date output pattern and



Art Unit: 3628

information of price variation of said fuel to be used (Iino: Figure 6C, see plant shutdown, Figures 7F and 7H, and Figure 12D, see fuel unit price).

32. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Takriti to have included the steps of receiving designation of an area of blocks where power generator output is presented in said first chart thereof, and presenting power generation volume, power generator start stop term, in date output pattern, and information of price variation of said fuel to be used as taught by Iino for the advantage of providing a system and method that will increase the efficiency of electric power production so as to contribute to the protection of the environment (Iino: column 1, lines 40-42).

33. As per claim 9, Takriti in view of Iino teaches the method of claim 6 as described above. Takriti further teaches the steps of: receiving designation of an area of blocks where in-trade electric power is presented in said first chart thereof (Takriti: Figure 3, "see Forecasted Trades for October 15, 1996" and Figure 11), and presenting trade unit price, trade volume and in-date supply pattern (Takriti: Figure 3, "see Forecasted Trades for October 15, 1996").

34. As per claim 10, Takriti in view of Iino teaches the method of claim 6 as described above. Takriti further teaches the steps of: receiving designation of an area of blocks where in-trade electric power is presented thereof (Takriti: Figures 9A and 9B), and presenting expected values and variances of both unit price and volume of electric power to be traded for a term that said designation appoints (Takriti: Figure 3, "see Forecasted Trades for October 15, 1996", see the varying prices per MWH).

35. As per claim 11, Takriti in view of Iino teaches the method of claim 6 as described above. Takriti further teaches the steps of: receiving a term to be specified in said time axis,



Art Unit: 3628

receiving a selection of an expanded scale or an shrunk scale of date or time zone of said term to be presented, and presenting a chart composed on a time axis defined in said expanded scale or said shrunk scale (Takriti: Figures 9A, 9B, and 11 – The Examiner notes, it is basic knowledge of one skilled in the art to shrink or expand the scale of a chart axis accordingly. The applied reference has been interpreted and applied assuming basic knowledge of one of ordinary skill in the art. According to *in re Jacoby*, 135 USPQ 317 (CCPA 1962), the skilled artisan is presumed to know something more about the art than only what is disclosed in the applied references. In *In re Bode*, 193 USPQ 12 (CCPA 1977), every reference relies to some extent on knowledge of persons skilled in the art to complement that, which is disclosed therein.).

36. Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takriti, U.S. Patent No. 6,021,402 (hereinafter: Takriti I) in view of Iino, U.S. Patent No. 5,873,251 and further in view of Takriti et al., U.S. Patent No. 5,974,403 (hereinafter: Takriti II).

37. As per claim 8, Takriti I in view of Iino teaches the method of claim 6 as described above. Takriti I further teaches the steps of: receiving a designation of an area of blocks for an interruption term of power supply (Takriti I: Figure 6C, see plant shutdown) and a restriction term of generator output is presented in said first step thereof (Takriti I: Figure 6C and column 10, lines 33-37), and presenting said interruption term of power supply, said restriction term of generator output or a generator output to be suppressed (Takriti I: Figure 6C and column 10, lines 33-37).



Art Unit: 3628

38. Takriti I in view of Iino does not teach the interruption term of power supply results from maintenance inspection.

39. Takriti II teaches the interruption term of power supply results from maintenance inspection (Takriti II: column 5, lines 15-21).

40. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Takriti I in view of Iino to have included the interruption term of power supply results from maintenance inspection as taught by Takriti II for the advantage of providing a tool for forecasting the spot price of electric power and the amount of power that may be traded in a market (Takriti II: column 3, lines 25-28).

41. As per claim 12, Takriti I in view of Iino teaches the method of claim 6 as described above. Takriti I in view of Iino further teaches the steps of: receiving said generator output (Iino: Figures 7F and 7H), a term to be specified in said time axis (Iino: Figures 7F and 7H – The Examiner notes, hours are specified in the time axis.), said interruption term of power supply (Iino: Figures 6C, see plant shutdown), said term of output restriction (Iino: Figures 6C, see plant shutdown), and determining a new said stochastic distribution, and presenting the said new stochastic distribution in a time-series form (Takriti I: Figures 9A, 9B, and 11).

42. Takriti I in view of Iino does not teach the interruption term of power supply regarding maintenance inspection.

43. Takriti II teaches the interruption term of power supply regarding maintenance inspection (Takriti II: column 5, lines 15-21).

44. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Takriti I in view of Iino to have included the



Art Unit: 3628

interruption term of power supply regarding maintenance inspection as taught by Takriti II for the advantage of providing a tool for forecasting the spot price of electric power and the amount of power that may be traded in a market (Takriti II: column 3, lines 25-28).

### *Conclusion*

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimoda et al., U.S. Patent No. 5,479,358.

The Examiner has cited particular portions of the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

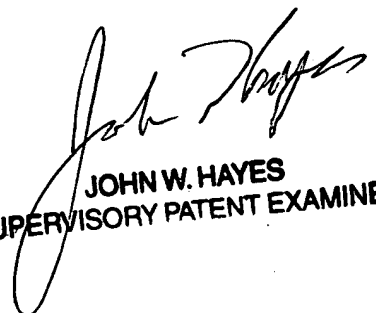
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Liou whose telephone number is 571-270-1359. The examiner can normally be reached on Monday - Friday, 7:30-5:00 (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3628

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**JOHN W. HAYES**  
**SUPERVISORY PATENT EXAMINER**